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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/693,682   | 10/23/2003  | Gregory B. Altshuler | 105090-0140         | 8658             |
| 21125  | 7590        | 06/02/2005           | EXAMINER            |                  |
| NUTTER MCCLENNEN & FISH LLP<br>WORLD TRADE CENTER WEST<br>155 SEAPORT BOULEVARD<br>BOSTON, MA 02210-2604 |             |                      | GIBSON, ROY DEAN    |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3739                |                  |

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,682

Applicant(s)

ALTSHULER ET AL.

Examiner

Roy D. Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/17/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 24-27 and 30-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23, 28, 29 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/9, 11/18/22/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 recites the compartment is capable of coupling to a phototreatment device and claim 20 recites the container is adapted to couple to a phototheatment device. These appear to be the same limitation.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7, 8, 10, 11, 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Baronov (6,059,820).

As to claims 1, 3-5, 7, 8, 10-11 and 20, Baronov discloses a container, comprising:  
a container housing (11) defining at least one compartment therein;

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a substance contained in the compartment, the housing and the compartment being capable of coupling to a phototreatment device (13 and 16) to permit heat transfer between the substance and the device; and  
an indicator (temperature sensor # 8) coupled to the compartment, wherein the substance is a consumable phase change substance, wherein the substance is a phase change material, including liquid tetrafluorethane which exhibits a phase transition from a liquid to a gaseous state (col. 2, lines 20-43).

As to claim 15, Baronov discloses the compartment is capable of being fluidly coupled to a heat dissipating element (Fig. 1, # 17 or Figure 5A, # 23 and col. 5, lines 18-340.

As to claim 16, Baronov discloses the at least one compartment further comprises a first compartment (Figure 5A # 21) adapted to couple to tissue through diamond rod (23), and a second compartment (Figure 1 # 17) adapted to couple to a heat dissipating element (16) in the phototreatment device.

As to claim 17, Baronov discloses the indicator is typical temperature sensor with an inherently electronic indicia or display.

As to claims 18 and 19, a temperature sensor inherently can be an infrared type with an optical detector and a display as the indicator.

As to claim 21, the container is inherently replaceable by the user, even if some disassembly is required.

As to claims 22-23, Baronov discloses a method of operating a phototreatment device comprising:

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coupling a container of an adjuvant substance to a phototreatment device, the container having at least one indicator (temperature sensor) associated therewith to permit monitoring of the substance;

evaluating the indicator (reading the temperature of the substance); and enabling operation of the phototreatment device if the evaluation is acceptable, wherein the step of enabling operation comprises activating a radiation source (col. 2, lines 20-43).

Claims 28, 29 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hohla (5,827,264). Hohla discloses a phototreatment device for use with a marker (fluorescent dye) and its method of operation to ablate tissue comprising: a radiation source (laser for ablation of epithelial tissue); and a detector (infrared scanning device) to detect the fluorescence from the dye and via a computer control the activation the radiation source (col. col. 3, line 65-col. 4, line 31).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 15, 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Reuter (6,436,094).

As to claims 1-10 and 20, Reuter discloses a container, comprising:

a container housing (110) defining at least one compartment (105) therein;  
a substance contained in the compartment, the housing and the compartment being capable of coupling to a phototreatment device (220) to permit heat transfer between the substance and the device; and  
an indicator (temperature sensor) coupled to the compartment, wherein the substance is a reuseable and consumable phase change substance, wherein the substance is a phase change material, including liquid CO<sub>2</sub> which exhibits a phase transition from a liquid to a gaseous state or ice which exhibits a phase transition from a solid to a liquid state or water (col. 3, line 33-col. 4, line 54 and col. 6, lines 20-42).

As to claim 15, Reuter discloses the compartment is capable of being fluidly coupled to a heat dissipating element (Fig. 3, # 303).

As to claim 17, Reuter discloses the indicator is typical temperature sensor with an inherently electronic indicia or display or a sensor which can be made of a color changing liquid crystal (optical indicia and col. 5, lines 38-43).

As to claims 18 and 19, a temperature sensor inherently can be an infrared type with an optical detector and a display as the indicator.

As to claim 21, the container is inherently replaceable by the user, even if some disassembly is required.

As to claims 22-23, Reuter discloses a method of operating a phototreatment device comprising:

coupling a container of an adjuvant substance to a phototreatment device, the container having at least one indicator (temperature sensor) associated therewith to permit monitoring of the substance;  
evaluating the indicator (reading the temperature of the substance); and enabling operation of the phototreatment device if the evaluation is acceptable, wherein the step of enabling operation comprises activating a radiation source (col. 6, line 54-col. 7, line 8).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai (6,461,296). Desai discloses an apparatus for delivering a substance (agent) to and heating of tissue with a laser the apparatus comprising a container (34) with the substance in a compartment therein, wherein the substance comprises a marker in the form of a photoactive marker or dye (col. 10, line 11-col. 11, line 27). But, Desai fails to specifically disclose an indicator coupled to the compartment. But, the examiner maintains that the addition of a temperature sensor (indicator with display) coupled to the compartment would have been obvious to a

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skillful artisan in order to determine when the tissue had reached a maximum or critical temperature.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chess (5,486,172) discloses a dual compartment container and phototreatment device combined that has all elements as claimed by claims 1-11 and 15-23 except for a temperature sensor which is taught by both Baronov or Reuter above; Whitcroft et al. (6,264,649) disclose a laser treatment head with a liquid flow heat exchanger; and Hobart et al. (6,770,069) disclose a laser applicator and system for exposing the skin to a pulsed laser source while simultaneously cooling the skin during procedures to remove hair or treat cutaneous vascular lesions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on M-F, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roy D. Gibson  
Primary Examiner  
Art Unit 3739

May 27, 2005